Appl. No. 09/902,074
Amdt. dated February 2, 2004
Reply to Office Action of October 31, 2003 (paper no.
10182003)

PATENT

REMARKS

In the Office Action mailed October 31, 2003 (paper no. 10182003), objections were raised to Claims 51 and 52; Claims 1 – 10, 13 – 20, 32 – 37, 40, 42 – 45, and 49 – 54 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Pat. No. 6,145,738 ("Stinson") in view of U.S. Pat. No. 6,341,169 ("Cadorette") and U.S. Pat. No. 5,787,186 ("Schroeder"); and Claims 11, 12, 38, and 39 were rejected under 35 U.S.C. §103(a) as unpatentable over Stinson, Cadorette, and Schoeder in view of U.S. Pat. No. 6,243,689 ("Norton"). The dependence of Claims 51 and 52 has been corrected to obviate the objections to those claims. The claim rejections are respectfully traversed.

To establish a *prima facie* case under §103, the cited references must teach or suggest all of the claim limitations and there must be some suggestion or motivation to combine the reference teachings as proposed. MPEP 2143. In this instance, the independent claims include limitations that are not taught or suggested by any of the cited references, which additionally include language that teaches away from the combination proposed in the Office Action.

None of the cited art teaches the limitations related to the feedback mechanism of "inputting feedback information regarding said biometric data differences into the trained evaluation system to cause the evaluation system to reorganize itself to make a determination that the first and second sets of biometric data are from a single individual despite said biometric data differences." The Office Action proposes to use aspects of Cadorette and aspects of Schroeder in combination to produce this limitation, implicitly acknowledging that neither of those references alone discloses it. In particular, the Office Action cites the following language from Cadorette as disclosing "inputting feedback information regarding the biometric data differences into the evaluation system to cause the evaluation system to make a determination that the first and second sets of biometric data are from a single individual despite the biometric data differences":

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> If the operator declares a match then the credential is verified and the system continues executing the protocol at <CREDENTIAL VERIFIED>.
> (Cadorette, Col. 15, ll. 56 – 57).

This language does not teach or suggest inputting feedback information to the evaluation system, but instead merely describes an override capability provided to the operator to accommodate cases where the credential is unusual in some way (see discussion below). The operator may determine whether the image on the unusual credential matches the captured subject image, possibly declaring the unusual credential verified, with the method described in Cadorette subsequently proceeding in the same manner as through the "AUTOMATIC VERIFICATION" for more usual credentials. Nothing in Cadorette teaches or suggests that information regarding the determination be fed back to change the behavior of the OFR algorithm, with which the Office Action appears to associate the evaluation system. Any application of the OFR algorithm after the manual comparison will produce the same result as it would before the manual comparison, contrary to the express requirements of the claim language.

By referring only to an "evaluation system" and not to a "trained evaluation system" in describing Cadorette, the Office Action acknowledges that there is no disclosure therein of a trained evaluation system. Instead, the Office Action relies on Schroeder as disclosing a trained evaluation system in the form of a neural network. But not only does Schroeder not teach the input of feedback information as recited in the claims, it specifically cautions against the use of such feedback:

> The major drawback of neuronal networks to generically identify any kind of pattern, available on the market, lies fundamentally in the fact that once the pattern that are to be identified have been defined, the system is then practically closed or incapable of recognizing any other new pattern which we wish to introduce, because depending on the complexity of the new pattern, the entire system must be restructured and reorganized in what is known as a "system training process", with a great loss of time. Translating this circumstance and characteristic to a face identity use means that every time a new face of an individual must be introduced in the data base of this specific person's particular features, the other the data base [sic] of features of other specific individuals must be restructured in this "system training process". This operation may take a few minutes when this is used to identify a couple of hundred faces of individuals. When this technology has to be used for groups of hundreds of thousands of individuals or millions of faces in what can be called "population system" use, it is not practical because it takes too long to reorganize and to recognize the features.
> (Schroeder, Col. 2, l. 60 – Col. 3, l. 12).

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Instead of using the feedback mechanism claimed, Schroeder teaches the use of defined master patterns, notably in such a fashion that "no real face, at the end of the process, is contained in the data base" (*id.*, Col. 6, ll. 28 – 39). Individuals are identified only according to the correlation of certain features with the master patterns (*id.*, Col. 6, l. 61 – Col. 7, l. 6). Thus, not only does Schroeder fail to teach or suggest the claim limitation, it also teaches away from the modification of Stinson and Cadorette proposed in the Office Action, a factor that has long been recognized as strong evidence that the modification is *not* obvious.

In addition, Cadorette fails to disclose the limitation of "having a human compare underlying sources for the first and second sets of biometric data if the automatic determination is that the first and second sets of biometric data are not from a single individual" (emphasis added). In particular, the manual comparison taught by Cadorette occurs only in response to a failure to identify the credential type, or when the credential type or a record for the credential number is not found in the Verification Reference Database (*see id.*, pathways to "<MANUAL VERIFICATION>" G in Figs. 2A – 2D; Col. 12, ll. 30 – 33; Col. 12, ll. 59 – 63; Col. 12, l. 64 – Col. 13, l. 2). If the OFR method is used to compare the owner and subject images, Cadorette teaches specifically that the transaction is denied (*see id.*, Fig. 2B, bottom decision element; Col. 13, ll. 18 – 20). Such denial is final. No provision is made to use the manual verification in response to a failure of the automatic verification as is recited in the claims. The manual verification thus has a completely different role in Cadorette (i.e. to accommodate unusual credentials) than in the claims (to overrule and re-train the trained evaluation system).
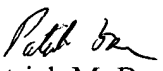
CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,

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